



Expeditionary Logistics Future Naval Capability

**National Defense Industrial
Association**

26 October 2000



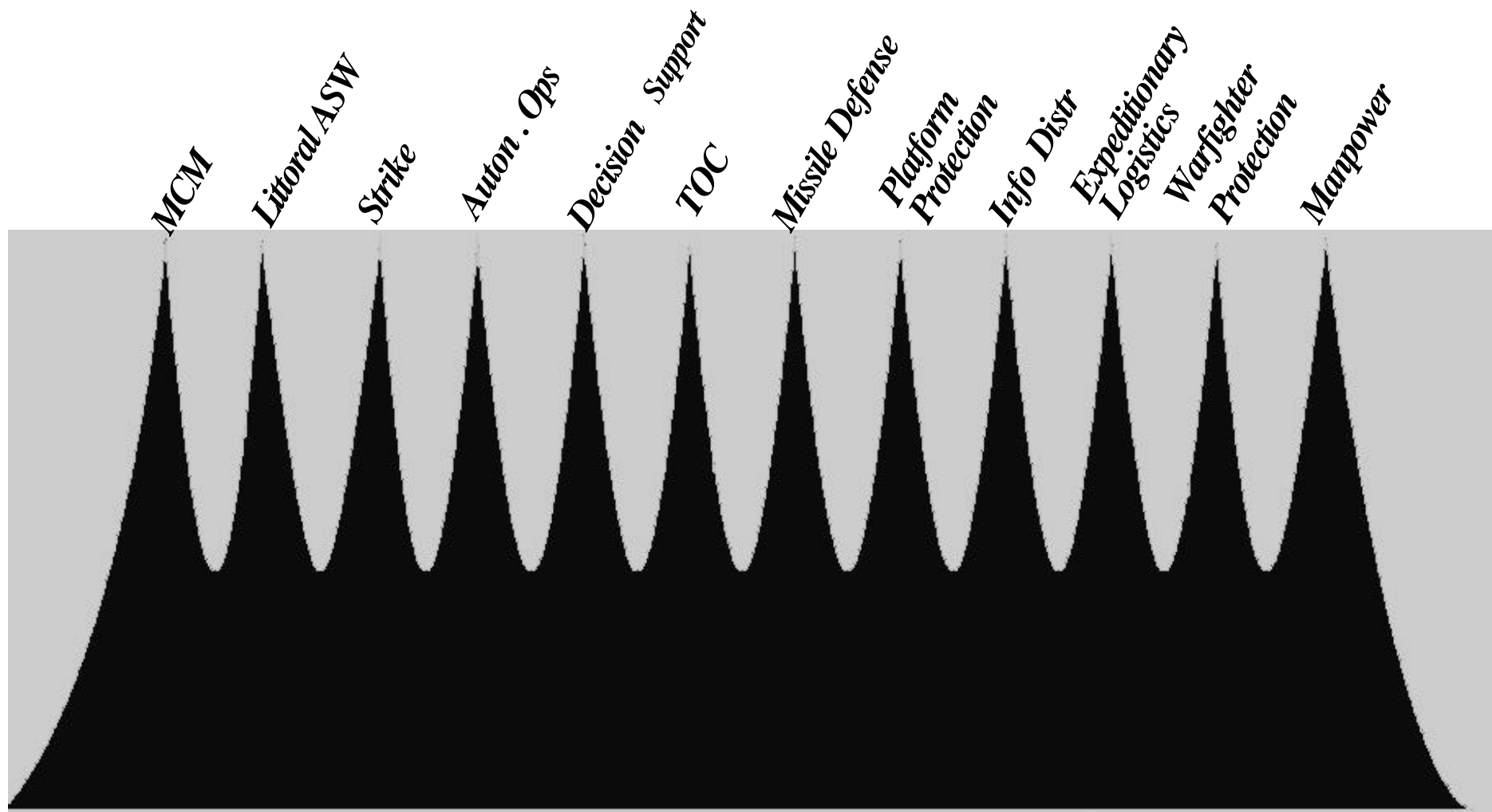
Background

- **Genesis of Future Naval Capabilities (FNCs)**
 - **Corporate Board**
- **Expeditionary Logistics is One of Twelve DoN FNCs**
- **Overall Objective is to Work Closely with Requirements and Acquisition Communities**
 - **Work to firm need statements/requirements**



Approved FNCs

June 1999

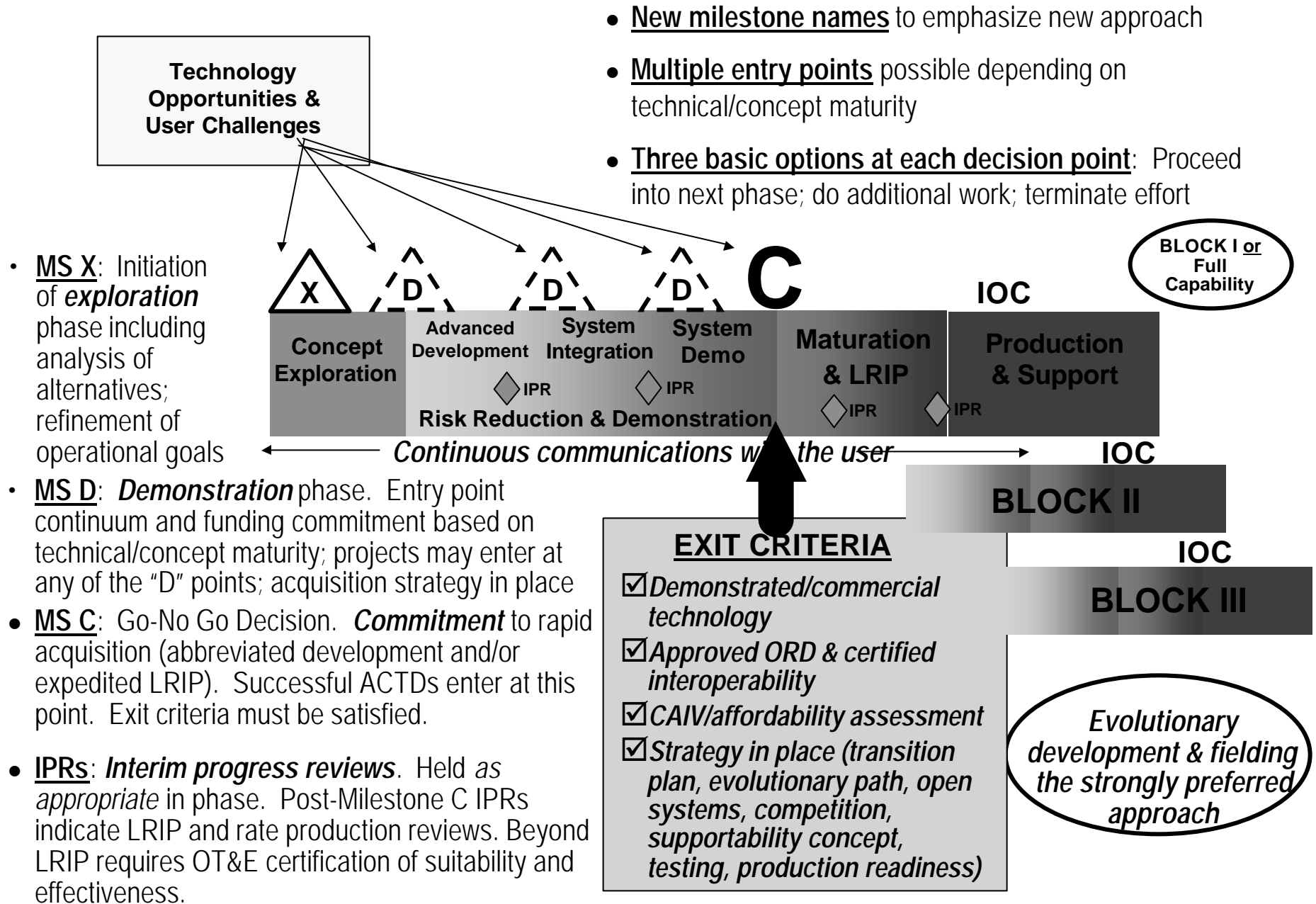




Definition of an “S&T Spike” (Future Naval Capability)

- S&T response to a DoN top priority capability requirement that:
 - Provides significant technology options and operating concepts for the DoN capability
 - Has a significant budget
 - Has definite milestones & objectives
 - Has concrete deliverables and a finite end state
 - Executes well defined demonstrations
 - Culminates in firm transitions

A MODIFIED ACQUISITION PROCESS





Naval Expeditionary Logistics

“Naval expeditionary logistics is about moving naval forces and sustaining their operations in a broad array of environments -from benign environments with relatively well developed infrastructures to more stressful situations involving forcible entry and limited infrastructure.” NSB



The Expeditionary Logistics FNC Focus

- The near term focus is on logistics missions in the littoral area of operation to enable effective and efficient movement of equipment, supplies, and personnel between sea based platforms and into and out of operating areas.
- Exploits science and technology enabled logistics capabilities in support of near-term, transitionable demonstrations/prototypes.



IPT Membership

- **Requirements**

- Mr. R. Hammond [AC(I&L)] – Chairman
- Mr. J. Kaskin [N42] – Co-Chairman

- **Acquisition**

- RADM D. Morral [PEO EXW]
- Col M. Hayden [MCSC]

- **S&T Resource Sponsor**

- Dr. B. Zahuranec [N91]

- **Science and Technology**

- Mr. T. Tesch [ONR]

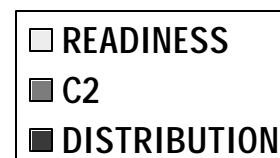
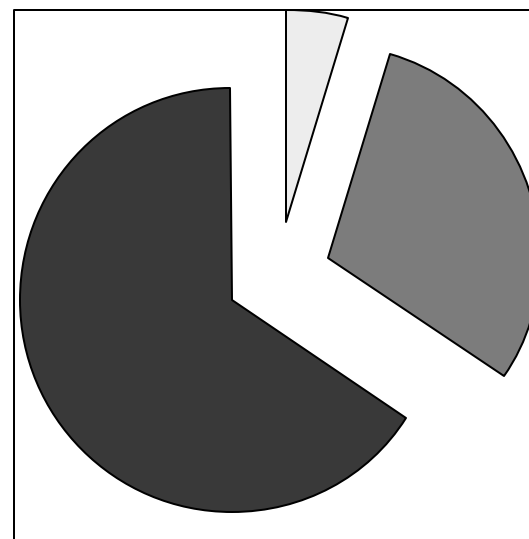
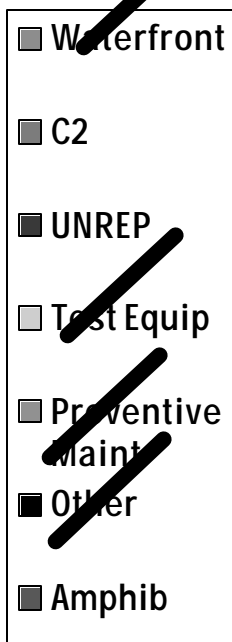
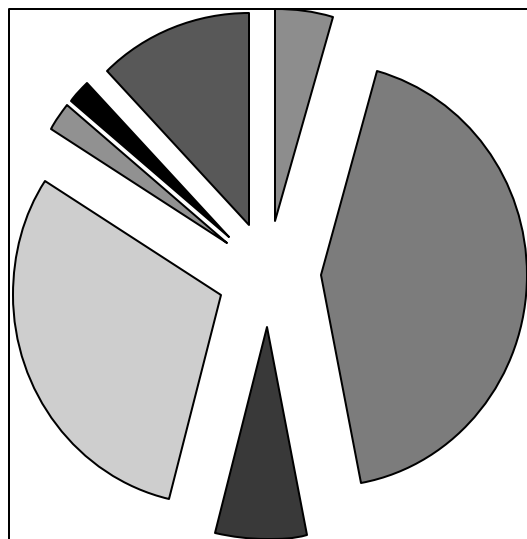


Transitioning to the FNC

- Existing ONR Logistics Program
 - Covers the Broad Area of Logistics
 - 40 Projects
 - About \$15M/Year (FY01 is the final year)
- Expeditionary Logistic Program
 - Focus is only on expeditionary logistics
 - 2 Primary Enabling Capabilities/16 Projects
 - \$162.5M between FY01 and FY07



More Narrow Robust Investment Area





FNC Architecture

**Future
Naval
Capability**

**Enabling
Capabilities**

**S&T Program
Supporting Technologies**



FNC Specification Development

- **FNC Contains 2 Primary Enabling Capabilities**
 - **Broken Into 16 Significant Demonstrations**

Distribution (65% of FNC)

- **Parafoils**
- **Strike Up/Down**
- **Reconfigurable Spaces**
- **Packaging/Fendering Materials**
- **Heavy UNREP and Rearming**
- **SS5 Connected Replenishment**
- **High Speed Sealift**
- **Ship to Shore Surface Craft**

C2 (32% of FNC)

- **CBM for Legacy Systems**
- **Readiness Sensors with TAV**
- **Situational Awareness**
- **Feedback Decision Support**
- **Log C2 for JTF/ATF/MAGTF**
- **Log Simulator**

Readiness (<3% of FNC)

- **Power**
- **Water**
- **Fuel Efficiency**



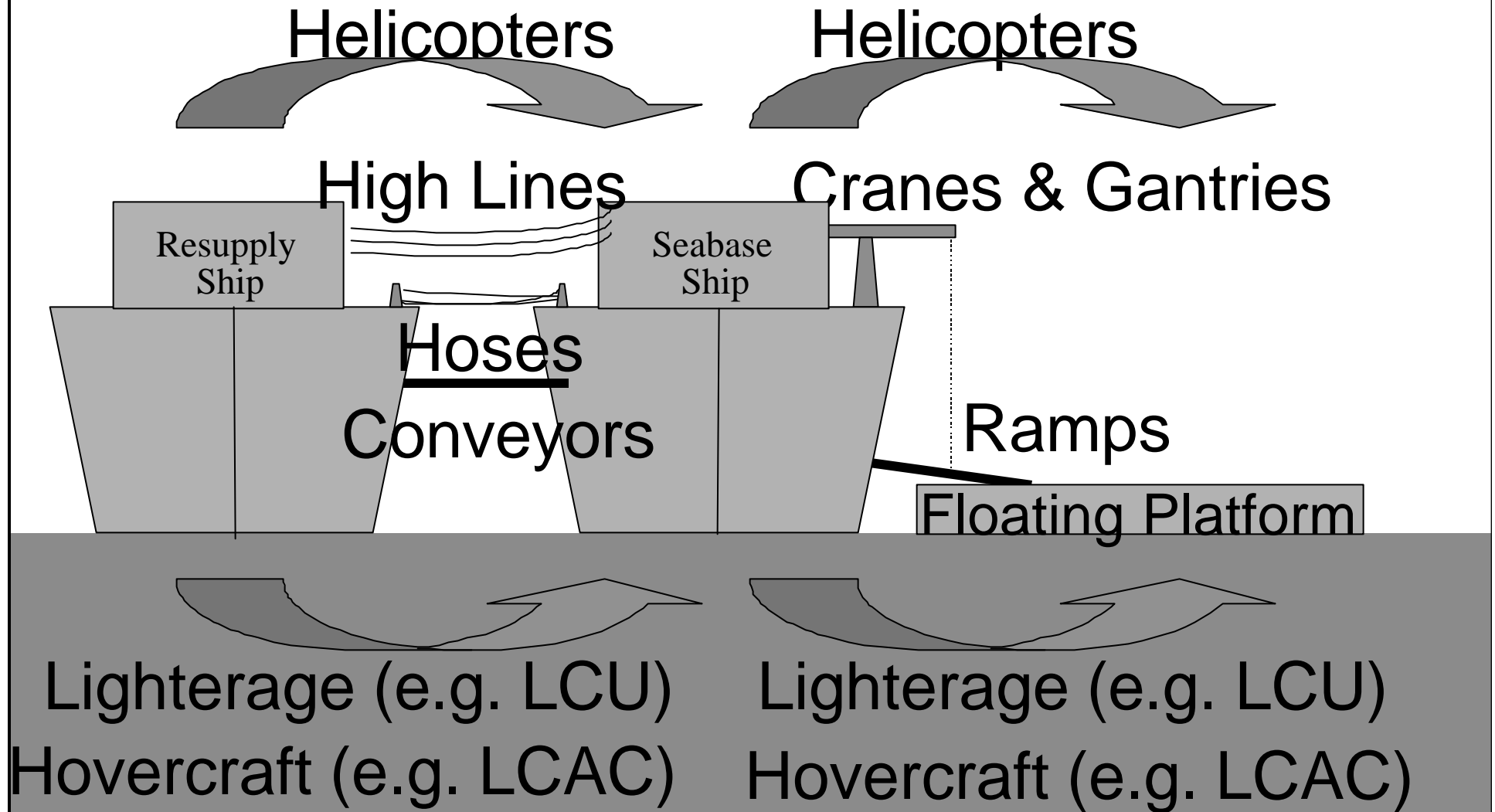
Distribution Focus

Deploy from/reconstitute to the sea base and supply/resupply the seabase/maneuver units.

- Technology to support tactical surface delivery vehicles (plus parafoil)
- Technology to support a strategic surface delivery vehicle
- Technology to support shipboard and landing force integrated packaging, handling (to include at-sea rearming), storage, selective offload, and transportation of cargo



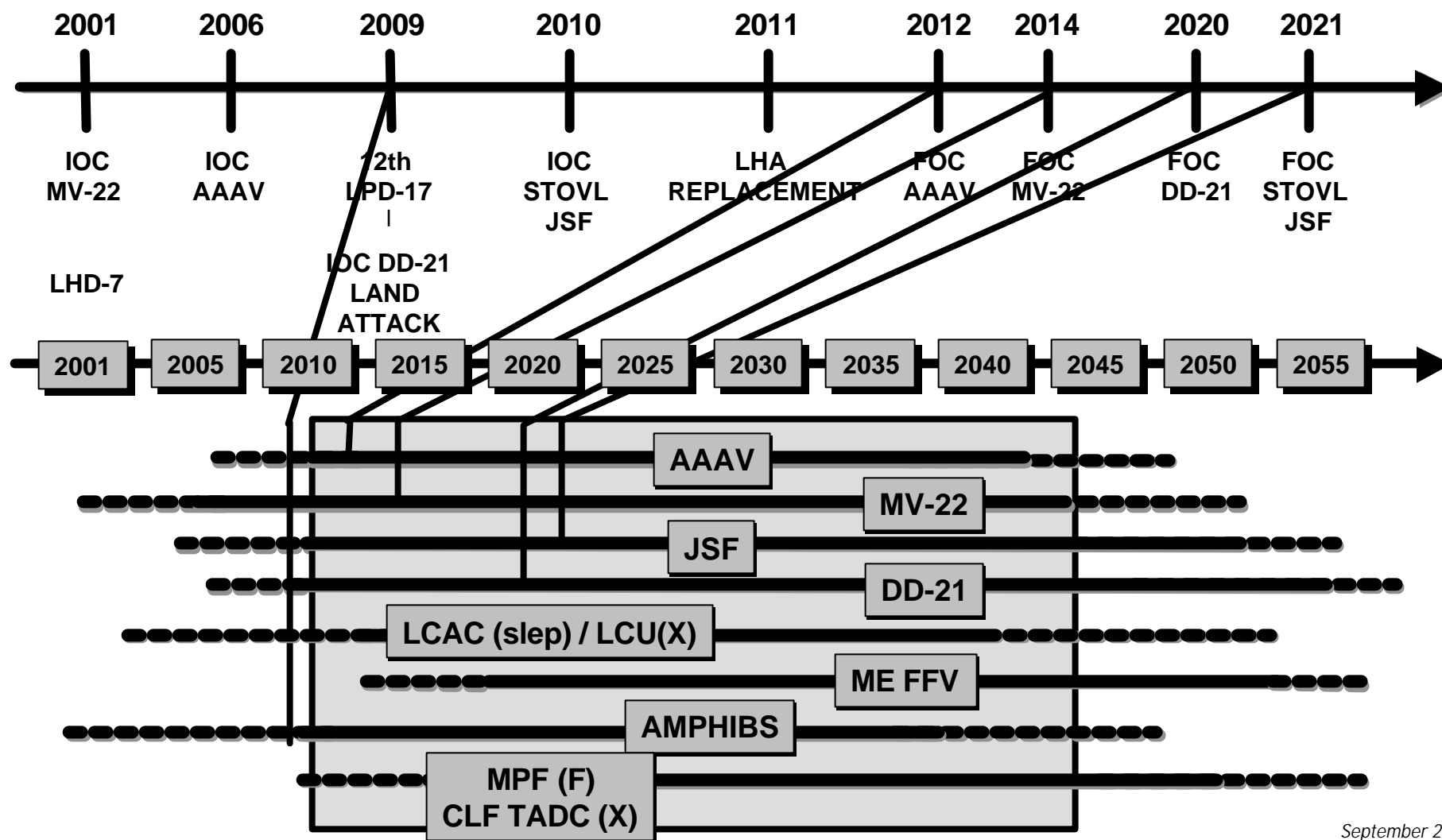
Distribution





The Creation of the SEABASE

Operational Capabilities



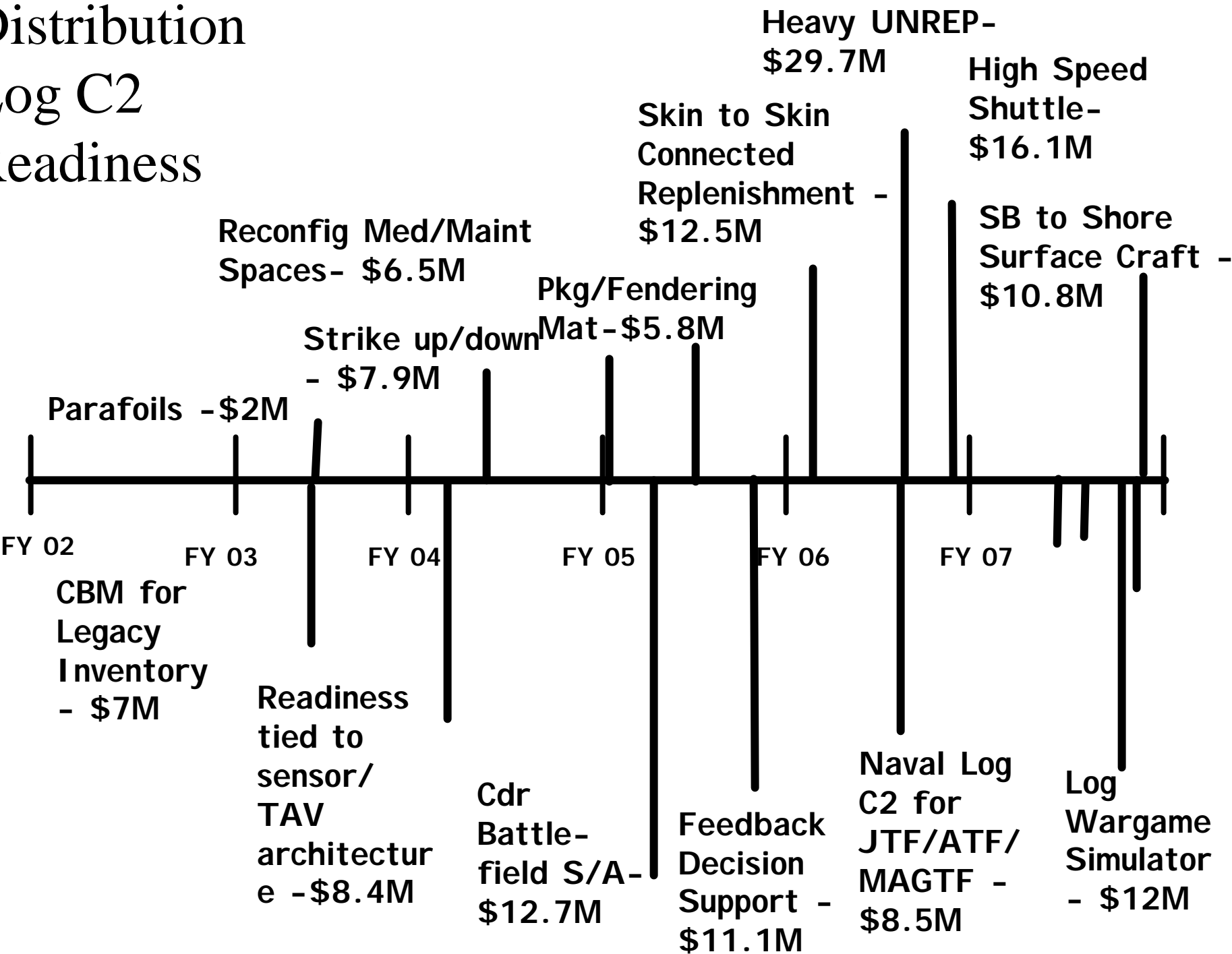


Logistics Command and Control

Maintain situational awareness of the landing force and Naval units, supported with integral feedback decision support systems.

- Integration of logistics C2 within the C4ISR architecture
- Logistics situational awareness to include total asset visibility of such items as fuel/munitions/shipboard material
- Modeling/simulation for predictive readiness and supply chain management
- Logistics wargame simulator

Distribution Log C2 Readiness





Logistics Investment Valleys

- Shore Infrastructure
- C2 Reach Back to Garrison/Industry
- Air and Ground Distribution Platforms
- Readiness/Consumption Reduction



Summary

- The FNC Process provides S&T funding and focus to Expeditionary Logistics
- Guidance from Navy/MC Requirements Organizations focused program on Distribution and Logistics Command and Control
- Program is just starting - \$4M seed money in FY01
- Goal is to transition S&T enabled capabilities into acquisition programs



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